Public Works (1905) Department.

G.O., No. 4277 / 4283 J.

DATED 4th May 1905

Proof

90 copies 7.5.0.
3
22/5
2 copies of draft with docket at the back
For the 5-7-9
30 copies P. ...
for docket
6

[Despatch Abstract.]

Vandiyur tank connected with the Periyar Project.

An estimate, amounting to Rs 2522, for improving the ——, sanctioned, and a copy of the Pro. ordered to be forwarded to the Government of India.

Vandiyur tank connected with the Periyar Project.

Forwarding a copy of the Pro. sanctioning an estimate, amounting to Rs 2522, for improving the ——

Indexed 9/5/05. for 7.E.A.

5/5

5.5.

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

IRRIGATION.
ACCOUNT.

Government {1905} of Madras.

PUBLIC WORKS.

Recd.	1905.	*Enclosures*
Regd.		*Spare copies*

G.O., Nos. 427, 428 I., 4th May 1905.

MAY.

Vandiyur tank connected with the Periyar Project.

Forwarding a copy of the Proceedings sanctioning an estimate, amounting to Rs. 2,522, for improving the —.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Irrigation.
Account.

Read—the following papers:—

From C. J. USSHER, Esq., Superintending Engineer, VI Circle, to the Chief Engineer for Irrigation, dated Trichinopoly, 15th March 1905, No. 203 C.E.

I have the honour to forward, for approval and sanction, two estimates—one amounting to Rs. 2,025 for improvements and the other Rs. 1,570 for the repairs to the Vandiyur tank, situated some 4 miles north-east of Madura. It is one of those ordered to be maintained by Government—*vide* G.O., No. 710 I., dated 19th August 1896.

2. The improvements chiefly consist in the extension of the surplus escapes at the left flank of the tank, and in providing new heads in front and rear of sluice No. 2. Plans for all these are also forwarded.

3. The repairs to the tank chiefly consist in the raising and strengthening the bund and repacking the revetment with a portion of new materials. Level sections of the tank accompany the estimate.

4. A report is attached to the estimate which gives further information. I may however point out that the proposed weirs provide for no rear aprons, as the ground in rear is reported to be hard enough and to require no such protection. I herewith forward a copy of the Executive Engineer's letter on this point, No. 151 E., dated 17th ultimo.

5. The estimates were kept back in this office along with others pending a reply from the Collector of Madura to a reference made by this office regarding the subject of contribution. As the question of contribution has since been settled, I now recommend that the outlay on the works be met wholly from Government funds.

6. The work is unremunerative and it may be expected to be completed by the end of March 1906.

Enclosures.

From M.R.Ry. A. V. RAMALINGA AIYAR Avargal, B.A., B.C.E., Executive Engineer, Madura Division, to the Superintending Engineer, VI Circle, dated 17th February 1905, Memo. No. 151-E.

In resubmitting herewith the estimate and plans for improvements to Vandiyur tank, Madura taluk, returned with remarks with your No. 362, dated 2-th January 1905, I have the honour to inform you that the ground in rear of the proposed escape is hard enough to stand without aprons and that there are no aprons in rear of the existing weirs.

REPORT to accompany the estimate for repairs and improvements to No. 141, Vandiyur tank, Madura taluk.

	RS.
Amount of estimate—	
Repairs	1,570
Improvements	2,025
Total ...	3,595

General.—The tank is one of those to be maintained as per G.O., No. 710 I., dated 19th August 1896.

Ayacut.—The area commanded by the tank is 1,024 acres, out of which 191 acres are inam lands in Melamadai village and the rest are Government lands.

Source of supply.—The tail end of 9th Branch channel enters the tank. It is not, however, intended to abandon the old river supply channel taking off from the Vaigai river about half a mile to the west of Madura bridge.

Surplus arrangements.—The existing calingulah at the right flank and the escapes at the left flank are not capable of discharging the maximum quantity estimated as likely to enter the tank. It is therefore proposed to make the escape at the left flank as one weir 601 feet long which, together with the right flank escape, will discharge the maximum surplus entering the tank. Sundry repairs to all the existing escapes are found necessary to the extent for which provision has been made in the estimate.

Sluices.—The three existing sluices are in fairly good order requiring neither any repairs nor improvements except that provision has been made in the estimate for constructing a front head and rear head to sluice No. 2 as the present front head is far out in the tank bed and the rear head is in bad order.

Bund.—The bund is very low and weak and is proposed to be raised to 4 feet and 5 feet above M.W.L. up to C.S. No. 6 and end respectively with a top width of 5 feet and side slopes of $1\frac{1}{2}$ to 1 both in front and rear.

Revetment.—As the bund is subject to the action of waves, the tank being a big and deep one, it is proposed to extend and improve the existing revetment to a height of 1 foot above M.W.L. with a slope of 1 to 1.

Submergence.—An extent of 73·01 acres of wet lands are subject to mamool submergence when the tank is at F.T.L. Cultivation is possible over nearly the whole extent as the depth of water standing over the fields is less than 1 foot in most cases. As the F.T.L. of the tank is not in any way interfered with, no consideration need be paid regarding the submerged lands.

F.T.L.—This has been fixed with reference to the water-marks observed and local enquiries made regarding the depth to which the water used to be stored by turfing, etc.

(Signed) A. V. RAMALINGA AIYAR,
Executive Engineer, Madura Division.

1st December 1904.

Note by the Chief Engineer for Irrigation.

The Superintending Engineer, VI Circle, submits estimates, amounting to Rupees 2,025 and Rs. 1,570, respectively, for improving and repairing the Vandiyur tank connected with the Periyár project. The proposed improvements include chiefly (1) the extension of the existing surplus works at the left flank to a total length of 601 feet, and (2) the provision of a tower head with regulating means in front, and a rear head wall with wings and returns, to sluice No. 2. The bottom width of the proposed rear returns of the sluice has been increased in this office from 2′ 6″ to 3′ 6″ and revetment allowed for the earth slopes in rear. These alterations have raised the amount of the estimate for improvements to Rs. 2,050 which is recommended for sanction.

2. The work is classed as unremunerative and will probably be completed by the 31st March 1906.

3. The estimate for repairs will be approved and returned to the Superintending Engineer to be sanctioned by him under "Maintenance and Repairs".

(Signed) A. H. GARRETT,
Chief Engineer for Irrigation.

20th April 1905.

ORDER—No. 427 I., dated 4th May 1905.

The following estimate is sanctioned :—

Imperial.
Capital Expenditure not charged to Revenue.
49. Irrigation.
Open Capital Account.
I. Works.
3. Distributaries.
C. Works.
Unremunerative Work.
Improving the Vandiyur tank.

		RS.
I. Work	... ...	2,050
II. Establishment	... ...	472
	Total ...	2,522

2. This sanction is registered as No. 12 I. of 1905-1906 and will expire on the 31st March 1906.

3. Ordered that a copy of these Proceedings be forwarded to the Government of India for information.

[Here enter No. 428 I., dated 4th May 1905.]

(True Extract.)

(Signed) A. H. GARRETT,
Joint Secretary to Government,
Irrigation Branch.

To the Chief Engineer for Irrigation.
,, Superintending Engineer, VI Circle, with plan and estimate.
,, Examiner, Public Works Accounts.

ENDORSEMENT—No. 428 I., dated 4th May 1905.

Forwarded.

(By order.)

(Signed) A. H. GARRETT,
Joint Secretary to Government,
Irrigation Branch.

Exd. C. Parthasarathy.

/

Stock Form No.
3,000—18-7-02.

Public Works (1905.) Department.

CURRENT No. 1272

From

[*Name*] C. J. U S S H E R Esquire.,

[*Designation*] Superintending Engineer, VI Circle,

[*Station*] Trichinopoly.

No. 203 CE

Dated 15 March 1905.

Enclosures {*Plans* 14, *Others* 3} *Total.* 17 +

Spare copies

+ Plans & estimates 1 & 16 sent separately

Received 16.3. 1905

Registered [illegible] 1905

Passed on, by—

Registering Clerk 190 .

U. R. Clerk 190 .

Referencer 190 .

Record Supdt. 190 .

Drafting Officer 190 .

SUBJECT

Vandiyur tank. Madura Taluq

Submitting for sanction plans & estimates for —

Papers

BACK PAPERS.

FURTHER PAPERS.

16/3/05

3

2

To

The ~~Secretary to Government~~ Chief Engineer, ~~Public Works Department.~~

For Irrigation,

MADRAS.

18

Sir,

Encl. 17 +

I have the honor to forward for approval and sanction - 2 estimates, amounting to Rs.2,025 for improvements and the other one Rs.1,570 for the repairs to the Vandiyur tank, situated some 4 miles north east of Madura. It is one of those ordered to be maintained by Government - Vide G.O.710-I, dated 19th August - 1896.

2. The improvements chiefly consist in the extension of the surplus escapes at the left flank of the tank, and in providing new heads in front and rear of sluice No.2. Plans for all these are also forwarded.

3. The repairs to the tank chiefly consist in the raising and strengthening the bund and repacking the revetment with a portion of new materials. Level sections of the tank accompany the estimate.

4. A report is attached to the estimate which gives further information. I may however point out that the proposed weirs provide for no rear aprons, as the ground in rear is reported to be hard enough and to require no such protection. I herewith forward a copy of the Executive Engineer's letter on this point, No.151-E, dated 17th ultimo.

5. The estimates were kept back in this office along with others pending a reply from the Collector of Madura to a reference made by this office regarding the subject of contribution. As the question of contribution has since been settled I now - recommend that the outlay on the works be met wholly from Government funds.

2 P

6. The work is unremunerative and it may be expected to be completed by the end of March 1906.

I have the honor to be,

Sir,

Your most obedient servant,

[signature]

Superintending Engineer,

VI Circle.

P.V.
14.3.05.

CHIEF ENGINEER FOR IRRIGATION.
18 MAR 1905
No. 1272

+ 1 Estimate file for improvements
9 Tracings
1 Estimate file for Repairs
5 Tracings
+ copy of letter No $\frac{E\ 151}{17-2-05}$ from the Ex. Engineer Madura

4

388

Copy of a memorandum No.151-E, dated 17th February 1905, from M.R.Ry, A.V.Ramalinga Aiyar Avl., B.A. B.C.E, Executive Engineer, Madura Division, to the Superintending Engineer, VI Circle, Trichinopoly.

In resubmitting herewith the estimate and plans for Improvements to Vandiyur Tank, Madura Taluk, returned - with remarks with your No.362 dated 28th January 1905, I have the honor to inform you that the ground in rear of the proposed escape is hard enough to stand without aprons and that there are no aprons in rear of the existing weirs.

[signature]

Superintending Engineer,

VI Circle.

[initials] 14.3.05.

CHIEF ENGINEER FOR IRRIGATION.
16 MAR 1905
No...... 1272

5

Plwez
4187/05

5 H 48P

Report to accompany the estimate for repairs and improvements to No.141.Vandiyur tank, Madura Taluq.

CHIEF ENGINEER FOR IRRIGATION. 16 MAR 1905

Amount of Estimate..) Repairs. ... Rs. ~~1,600.~~ 1570
) Improvements. Rs.2,025.
Total ... ... Rs. ~~3,625.~~ 3,595

General. The tank is one of those to be maintained as per G.O.No.710/I dated 19th August 1896.

Ayacut. The area commanded by the tank is 1024 acres, out of which 191 acres are Inam lands in Melamadai village and the rest are Government lands.

Source of supply. The tail end of 9th Branch channel enters the tank. It is not however intended to abandon the old river supply channel taking off from the Vaigai river about ½ a mile to the west of Madura Bridge.

Surplus arrangements. The existing calingulah at the right flank and the escapes at the left flank are not capable of discharging the maximum quantity estimated as likely to enter the tank. It is therefore proposed to make the escape at the left flank as one weir 601 feet long which together with the right flank escape will discharge the maximum surplus entering the tank. Sundry repairs to all the existing escapes are found necessary to the extent for which provision has been made in the estimate.

Sluices. The 3 existing sluices are in fairly good order requiring neither any repairs nor improvements except that provision has been made in the estimate for constructing a front head and rear head to sluice No.2. as the present front head is far out in the tank bed and the rear head is in bad order.

Bund. The bund is very slow and weak and is proposed to be raised to 4 feet and 5 feet above M.W.L. up to C.S. No.6 and end respectively with a top width of 5 feet and side slopes of 1½ to 1 both in front and rear.

Revetment. As the bund is subject to the action of waves the tank being a big and deep one, it is proposed to extend

6

6

5810

and improve the existing revetment to a height of 1 foot - above M.W.L. with a slope of 1 to 1.

Submergence.

An extent of 73.01 acres of wet lands are subject to mamool submergence when the tank is at F.T.L. Cultivation is possible over nearly the whole extent as the depth of water standing over the fields is less than 1 foot in most cases. As the F.T.L. of the tank is not in any way interfered with, no consideration need be paid regarding the - submerged lands.

F. T. L.

This has been fixed with reference to the water marks observed and local enquiries made regarding the depth to which the water used to be stored by turfing &c,.

Contribution.

vide para 5. of S.E.'s letter no 203 of 15/3/35 The work has to be carried out wholly from Govt. funds -

As the proposed improvements and repairs to the tank equally benefit the Inamdhars of Melamadai as well, the Collector of Madura has been addressed to make the - necessary arrangements for recovery of contribution amount shown in the enclosed statement as soon as the estimate is sanctioned by Government.

A V Ramalingam
1/12/34

Executive Engineer,

Madura Division.

PWC 3/4187/05

7

P. W. D. IRRIGATION.

Current No. 1272

D. E. I.

Orders are requested if the estimate may be checked for sanction

17.3.05

E. I. I have known the tank for years, I don't believe there is any chance of its breaching if the bund is kept in fair order.

A good deal of its free catchment which was forming waste is now converted into wet land & the max^m run off must be if anything less than formerly.

I have always doubted whether a higher coeff^t than 1.00 should not be taken in calculating the diminution due to upper tanks

17/3/05.

D.E.I. The value of the small C has been fixed as $\frac{1}{5}$ of the big C according to Proff^l. Circular No. 22 A dated 8/3/1890 – hence 1.00 has been allowed to stand – vide flag

18/3/05

Check carefully.

18.3.05

18/3/05

(133)

[E. I. Form No. 42—600—23-8-04.]

8

Public Works Department,

Irrigation Branch.

Current No. 1272 of 16-3-05

Letter No. 203 CE

Dated 15-3-05

From The SE 6th circle (Mr. C J Wesley)
Prepared by Ex Engr. Madura (Mr. A.V. Ramalingaiyer)

NOTE by Technical Section.

78 J

Name of work. Improving & repairing No. 141 Vandiyur tank. Madura taluk. Periyar affected.

Amount of Estimate Rs. Improvements 2025
Repairs 1570
Total 3595

* prepared by Mr. A.V. Ramalinga Aiyer

Surplus works. Area of free basin = 4 sq miles
Combined Catchment area = 37.85 sq miles.
Total Discharge to be provided for = 4619 cft per sec
Existing Calingulah at right flank is 29 ft long with crest at 1.29 ft above F.T.L. The crest to be lowered to F.T.L. 426-00.
At left flank. There are two weirs & one Calingulah to an aggregate length of 411 ft.
The crest of the weirs are uneven & will be made up to one uniform level of 426.00 F.T.L. The damstones of the Calingulah to be cut down to F.T.L.
The Existing surplus works are inadequate the length of the escapes at the left flank is proposed to be extended to a total length of 601 ft by constructing body walls in the spaces between Calingulah No. 2 & weir No 3 and weir No 3 & weir No 4. Provision is also made in the Estimate for repairing the Existing works where necessary.

Sheet No. 7

9

<u>Sluice No 2</u>. The Estimate provides for providing a tower head with regulating means in front & a rear head wall with wings & returns. The bottom width of the rear returns (surcharged) has been increased from 2'-6" to 3'-6" and revetment allowed for the earth slopes in rear. Cut stone flooring has also been provided for for a width of 4'-0" over the rear floor between the wings. Rear floor = 414.00 - Sill level in front = 415.25. Area to be irrigated by the sluice = 459.83 acres.

<u>Repairs to the bund</u>. The bund from the right flank to a length of 1600 ft is proposed to be raised to 4 ft above M.W.L & the remaining portion to 5 ft above M.W.L with top width 5 ft and slopes 1½ to 1. ~~Its pro~~

<u>Revetment</u>. The front slope is revetted from 2150 ft from the ~~left~~ Right flank to the Calingulah No 2 at the left flank a length of 4273 leaving a break of about 500 ft. It is proposed to revet the break & to raise the revetment to 1 ft above M.W.L from 4300 to 6000 ft. The revetment will also be extended for 150 ft on the left.

The Estimate for the improvements has been increased from Rs 2025 to Rs. 2050 ✓ owing to the alterations to the sluice referred to above.

In last para of the report it is stated that the tank is a Contribution work; but in SE's letter No 203/15/3/05 he reports that the question of Contribution has subsequently been settled and that the whole work should be carried out at the Govt Cost.

[initials] 16/4/05

[initials] 17.4.05

A/ M/S 52 VI

10 P.W.C. No. 4187
Recd & Regd 28.4.05
Enclos: 15 / 9 } 24

Public Works Department,
Irrigation Branch.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following

From the Supg. Engineer VI Circle, d/15th March 1905 No. 203 C.E.

Note by the Chief Engineer for Irrigation.

The Supg. Engineer, VI Circle, submits estimates amounting to Rs. 2,025 and 1,570 respectively for improving and repairing the Vandiyur tank connected with the Periyar Project. The proposed improvements include chiefly (1) the extension of the existing surplus works at the left flank to a total length of 601 ft. and (2) the provision of a tower head with regulating means in front, and a rear head wall with wings and returns, to Sluice No. 2. The bottom width of the proposed rear returns of the sluice has been increased in this office from 2'-6" to 3'-6" and revetment allowed for the earthslopes in rear. These alterations have raised the amount of the estimate for improvements to Rs. 2,050 which is recommended for sanction.

2. The work is classed as unremunerative and will probably be completed by the 31st March 1906.

3. The estimate for repairs will be approved and returned to the Supg. -

× Memo submitted below for approval

2

Engineer to be sanctioned by him under "Maintenance and Repairs".

Order No 4279. of 4.5.05

The following estimate is sanctioned:-

Imperial

Capital Expenditure not charged to Revenue.

49 Irrigation

Open Capital Account

I Works

3 Distributaries

C Works

Unremunerative work

Improving the ~~Vandiur~~ Vandiyur Tank

I Work ---------	Rs. 2,050
II Establishment	472
T o t a l --	2,522

2. This sanction is registered as No. 12 I 1905-06 and will expire on the 31st March 1906.

3. Ordered that a copy of these Proceedings be forwarded to the Govt. of India for information.

(H.E. No 4280 d/ 4.5.05)

Endorsement

F o r w a r d e d.

DESPATCHED 29 MAY 1905

Issue

20.4.05

20/4/05

To

The Chief Engr. for Irrgn.
" Supg. Engr. VI Circle. with plans & estimate
" Examiner P.W. Accts.

DESPATCHED 25 MAY 1905